

Appl. No.: 10/733,697
Amdt. dated September 6, 2006
Reply to Telephone Conference of August 30, 2006

Amendments to the Claims:

1. (cancelled)
2. (previously presented) Apparatus according to Claim 37, further including a controller for controlling the operation of the regenerative heater.
3. (original) Apparatus according to Claim 2, further including at least one temperature sensor in communication with the controller.
4. (cancelled)
5. (previously presented) Apparatus according to Claim 37, wherein the polymer melt generator comprises an extruder or a polycondensation reactor.
6. (cancelled)
7. (previously presented) Apparatus according to Claim 37, wherein the at least one spin pump is configured to meter the polymer melt to the spinning nozzles.
- 8.-9. (cancelled)
10. (previously presented) Apparatus according to Claim 37, wherein the length of each of the plurality of distribution lines is substantially the same.
- 11.-36. (cancelled)
37. (previously presented) An apparatus for melt spinning multifilament yarns, comprising
a polymer melt generator for providing a polymer melt,

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a spin beam which includes a plurality of spinning nozzles, at least one spin pump connected to the polymer melt generator, and a plurality of distribution lines leading from the spin pump to respective ones of the spinning nozzles,

an operational heater for directly heating the spin pump and the distribution lines of the spin beam to an operational temperature, and

a separate regenerative heater for directly heating the spin pump and the distribution lines of the spin beam to a regeneration temperature above the operational temperature so as to convert any organic deposits in the pump and distribution lines to gases or vapors which may then be removed.

38. (previously presented) The apparatus according to Claim 37, wherein the at least one spin pump and the plurality of distribution lines are housed within an enclosed cavity, and wherein the operational heater comprises a heat transfer medium and means for circulating the heat transfer medium through the cavity.

39. (previously presented) The apparatus according to Claim 38 further comprising a collection reservoir for receiving the heat transfer medium from the cavity, and wherein the regenerative heater comprises means for circulating hot air through the cavity after the heat transfer medium has been transferred to the collection reservoir.

40. (previously presented) The apparatus according to Claim 39, wherein the heat transfer medium comprises oil or Diphyl.

41. (previously presented) The apparatus according to Claim 39, wherein the means for circulating hot air through the cavity comprises a blower and a filter capable of removing residue generated during the regeneration of the spin beam from the circulating hot air.

42. (previously presented) The apparatus according to Claim 39, wherein the enclosed cavity includes an exhaust device for exhausting gases generated during a regeneration of the spin beam.

43. (previously presented) The apparatus according to Claim 42, wherein the exhaust device includes a filter for filtering the gases generated during the regeneration of the spin beam.

44. (previously presented) The apparatus according to Claim 37, wherein the operational heater is configured to heat the at least one spin pump and the distribution lines to an operational temperature of between about 250 to 330°C, and wherein the regenerative heater is configured to heat the at least one spin pump and the distribution lines to a regeneration temperature of between about 450 to 550°C.

45. (previously presented) The apparatus according to Claim 37 wherein the regenerative heater is removably attached to the spin beam.

46. (previously presented) The apparatus according to Claim 37 wherein the regenerative heater comprises electrical heating elements which are in contact with the at least one spin pump and the distribution lines.

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47. (cancelled)

48. (previously presented) The apparatus according to Claim 37, wherein the at least one spin pump is connected to the polymer melt generator via a melt feed line, and wherein the apparatus further comprises means for heating the melt feed line to the regeneration temperature.

49. (previously presented) The apparatus according to Claim 37 wherein the at least one spin pump and the plurality of distribution lines are housed within an enclosed cavity, and wherein the distribution lines are in the form of tubes which are positioned within the enclosed cavity.